

March 31, 2003

Charles to Constitution

Mr. Femi Akindele Residual Project Manager Kentucky/Tennessee Section U.S. Environmental Protection Agency Region IV 61 Forsyth Street Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 03, Second Quarter (FY03-2Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele

In accordance with paragraph 11, under <u>Reporting Requirements</u>, of the subject Consent Order and Attachment 1. Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, <u>Air Quality Monitoring</u>, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560 and received by MSD on March 18, 2001.

- 1. URS Corporation letter dated March 2, 2003, 2 pages.
- 2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1 page.
- 3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: December 20, 2002, 1 page.
- 4. Table 2, On-Site Meteorological Data, Sampling date, December 20, 2002, 1 page.
- 5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: December 20, 2002, 1page.



Mr. Femi Akindele March 31, 2003 Page 2

Please advise if you have any questions concerning the attached information.

Sincerely.

Richard H. Watkins, Sr. Special Assistant to Director

RHW/rw Lees-03-2Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet

Mr. Ken C. Logsdon, Division of Waste Management

H. J. Schardein, Executive Director

Lees Lane File

URS

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March 2, 2003

Mr. Dan Sammons Chief Chemist Louisville Metropolitan Sewer District 4522 Algonquin Parkway Louisville, KY 40211

Dear Dan:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on 20 December 2002 (Quarter 32).

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. All ambient air samples indicate low levels of the primary analytes at a similar level compared to the last reporting quarter. Quality control data from the laboratory replicates are of high quality, however field blank levels of methylene chloride exceed those of four of the six gas well samples, which are near the analytical detection limit.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were cool (38-47°F) with a light to moderate wind (7-22 knots) during the sampling day. Because meteorological data were not available for the site, the information displayed in Table 2 was obtained from the Louisville Airport National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 7-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the

TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total nonmethane hydrocarbons prior to field deployment. All samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications.

URS Corporation - North Carolina 1600 Perimeter Park Drive, Suite 100 Morrisville, NC 27560 Tel: 919.461.1100 Fax: 919.461.1415

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Mr. Dan Sammons 03/02/03 Page 2

The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The field blank canister reported positive hits for methylene chloride (.558 ppb) and toluene (.023 ppb). These concentrations are similar to those reported in previous sampling periods. The reported results have not been blank corrected in attached tables per our standard project procedure.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. The gas monitoring wells were screened with a photoionization detector (PID) to test for the presence of volatile organic compounds (VOCs) prior to field sample collection. No significant VOC concentrations were detected with the PID.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux

Project Manager

Enclosure

c: Kris Fields, URS/LOU Project File/Task 32



TABLE 1

TO-15 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: 20 DECEMBER 2002

SAMPLING DATE: 20 DECEMBER 2002

	Ambient Air Samples							
Sample ID	U1	A1	A2	R1	R2	R3		
Canister ID	RA2032	RA2033	HL0905	RA2025	RA2034	RA2029		
Dilution Factor	2.59	3.10	2.93	2.65	2.56	2.68		
Location	Upwind	On-site	On-site(dup)	Residential	Residential	Residential		
Veriflow ID	A168513	A168475	A133246	A218961	A218997	A181856		
Compound (ppbV)								
Benzene	0.192	0.212	0.146	0.168	0.214	0.335		
Methylene chloride	1.010	2.980	0.210	0.353	0.494	3.150		
Toluene	0.239	0.374	0.140	0.138	0.232	0.860		
Vinyl chloride	ND	ND	ND	ND	ND	ND		
Xylene (Total)	0.060	0.080	ND	ND	0.065	0.423		
Methane (ppmV)	11.4	10.9	10.7	11.4	11.3	11.1		

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TABLE 2

LOCAL METEOROLOGICAL DATA

SAMPLING DATE: 20 DECEMBER 2002

	Barometric			Wind	Wind	
	Pressure	Temperature	Dewpoint	Direction	Speed	
Time	(in Hg)	(F)	(F)	(from)	(knots)	Observation
0600	29.23	39	37	WSW	8	CLR
0700	29.25	38	37	SW	7	LGTRAIN
0800	29.27	39	36	SW	10	LGTRAIN
0900	29.28	41 1	34	WSW	12	LGTRAIN
1000	29.28	43	33	WSW	14	LGTRAIN
1100	29.26	45	31	WSW	12	LGTRAIN
1200	29.24	46	29	WSW	18	LGTRAIN
1300	29.23	47	29	WSW	22	LGTRAIN
1400	29.23	47	28	WSW	21	LGTRAIN
1500	29.24	47	27	WSW	18	LGTRAIN
1600	29.25	46	25	W	16	LGTRAIN
1700	29.25	44	25	WSW	16	LGTRAIN

Source: National Weather Service, Louisville, Ky.



TABLE 3

TO-15 DATA SUMMARY FOR GAS MONITORING WELL SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: 20 DECEMBER 2002

SAMPLING DATE: 20 DECEMBER 2002

	Well Samples							
Sample ID	G1	G2	G3	G4	G5-L	G5-R	BLANK	
Canister ID	RA2030	RA2035	RA2028	RA2062	RA2031	RA2036	HL0941	
Dilution Factor	2.55	2.59	2.58	2.49	2.54	2.54	2.63	
Orifice	A193111	2	G-3	A193099	A193108	A193104	NA	
Compound (ppbV)								
Benzene	0.110	0.198	ND	.0.178	0.199	0.167	ND	
Methylene chloride	0.965	0.607	ND	0.070	0.076	0.043	0.558	
Toluene	0.160	0.180	0.052	0.160	0.189	0.145	0.023	
Vinyl chloride	ND	ND	ND	0.19	ND	ND	ND	
Xylene (Total)	ND	. 0.033	ND	ND	0.038	. ND	ND	
Methane (ppmV)	4.94	9.61	8.84	9.35	9.18	9.37	ND	

ND= Non-Detect

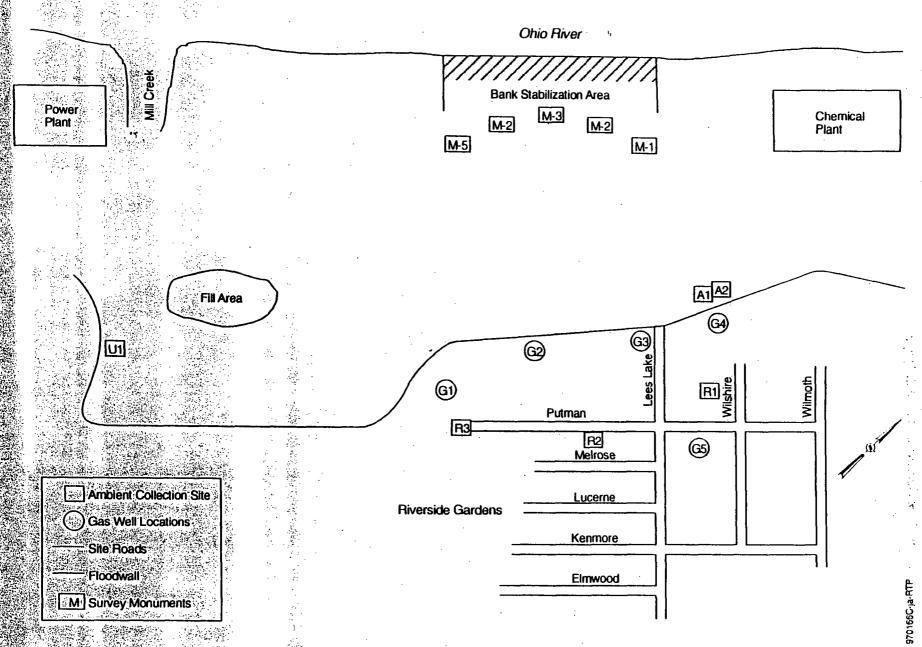


Figure 1. Lees Lane Landfill Sampling Locations